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**BEFORE THE BOARD OF PATENT APPEALS
AND INTERFERENCES**

Application Number: 10/814,485
Filing Date: March 31, 2004
Appellant(s): KOTZIN ET AL.

David S. Noskowicz
For Appellant

EXAMINER'S ANSWER

This is in response to the appeal brief filed 07/03/2008 appealing from the Office action mailed 11/02/2007.

1. Real Party in Interest

A statement identifying by name the real party in interest is contained in the brief.

2. Related Appeals and Interferences

The examiner is not aware of any related appeals, interferences, or judicial proceedings which will directly affect or be directly affected by or have a bearing on the Board's decision in the pending appeal.

3. Status of Claims

The statement of the status of claims contained in the brief is correct.

4. Status of Amendments After Final

No amendment after final has been filed.

5. Summary of Claimed Subject Matter

The summary of claimed subject matter contained in the brief is correct.

6. Grounds of Rejection to be Reviewed on Appeal

The appellant's statement of the grounds of rejection to be reviewed on appeal is correct.

7. Claims Appendix

The copy of the appealed claims contained in the Appendix to the brief is correct.

Evidence Relied Upon

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Nykanen et al. U.S.P.G. Pub. 2002/0173295

November 21, 2002

5169342

Steele et al.

12-1992

8. Grounds of Rejection

The following ground(s) of rejection are applicable to the appealed claims:

- 9.** Claims 1-16, and 20-21 are rejected under 35 U.S.C. 102(b) as being anticipated by Nykanen et al. (U.S. Patent: 6,714,778)

As to claim 1, Nykanen teaches a method of representing content management in an electronic device (100) having a context sensor (three-axis acceleration sensor 134) (i.e. the content that is on the web server is downloaded back to the device) (see Fig. 3, [0145], [0147]):

receiving signals from a context sensor (touch sensor 124); determining a contextual characteristic of the device based on the received context sensor signals (i.e. the various sensors such as audio, positioning, touch, ambient light, and three-axis acceleration all generate metadata that is then processes by the context inference engine 136) (see Fig.2, [0092], [0106]);

associating the determined contextual characteristic with a data management function of the device (i.e. the recognition result can be used by a health maintenance application program in the wireless device 10, to provide useful and appropriate information to the user, for example by using the touch sensor, fatigue state can be determined to exist) (see Fig.2, Fig.2A, [0116], [0117], [0118]);

and determining a virtual physical representation to be output in response to the execution of the data management function (i.e. health maintenance application can process and recognition result and in response signal alarm to the sensed fatigue (physical condition) in the user, and access database and suggesting medication to palliate the sensed fatigue) (see Fig.2A, [0116], [0117]).

As to claim 10, Nykanen teaches a method of content management in an electronic device (100) comprising (i.e. the wireless device 100 update privacy feature, by updating personal data) (see Fig.1):

selecting data to be transferred, wherein said data is stored in a first device (i.e. the user is enabled to control which application programs in the wireless device 100 are granted access to the user's private context information, and also control context inference server, therefore transmitting only the information that is designated) (see [0019]);

sensing a contextual characteristic of the first device (i.e. the context inference engine has awareness of the user's context) (see [0019]);

establishing a connection (i.e. using Wireless Application Protocol via the cellular network) (see Fig.1) between the first device (100) and a second device (i.e. network server 140) (see Fig.1, [0020]);

transferring the selected data to the second device (see Fig.1, [0019]);

and displaying a virtual representation (health fatigue state) of the sensed contextual characteristic of the device (i.e. the health maintenance application pick up the context interpretation and decide if the fatigue state is reach, if so a warning is made an a suggestion of medication is displayed which will give the user the information of the detection of the fatigue state) (see [0116], [0117]).

As to claim 11, Nykanen teaches a method of executing a command resulting from a sensed gesture in a handheld communication device (100) comprising (i.e. the gesture is what ever movement the user makes that activate [B] RUN AN APPLICATION in the Context Sensitive Service menu Fig.1D) ([0071]-[0092]):

activating a first operation mode of the handheld device (i.e. Context Sensitive Service which refers to the full activation of the context sensors) (see [0071]-[0092]);

receiving input signals from a gesture sensor corresponding to a predetermined gesture of the handheld device (i.e. when the user put the wireless device in hand to use, the health maintenance application is triggered to read the state of health or fatigue) (see [0116], [0117]);

executing an algorithm in said portable communication device in response to said command or said sensor measurement meeting a first criteria (i.e. the algorithm is used by the context inference engine 136 to identify the health/fatigue state that the user is in after reading the metadata from the tactile and force sensors) (see [0116], [0117]);

and presenting a virtual representation of a physical principle on a user interface (212) of the device (i.e. the user is alerted the virtual physical state of fatigue and using the display (212), even suggesting a medical remedy to the state) (see [0116], [0117], [0118]).

As to claim 12, Nykanen teaches an electronic device comprising:

a housing (i.e. wireless device 100 by definition is a device that has a housing)
(see Fig.1);

a microprocessor (i.e. central processor 210) carried in the housing (100);

a user interface (i.e. display 212) coupled to the microprocessor (210) and
carried on the housing (100);

a context characteristic sensor (i.e. touch sensor 124) electrically coupled to the
microprocessor (210) (i.e. since the touch sensor exist inside the housing and transmit
data to the microprocessor via sensor interface 208, they electrically coupled) (see
Fig.2, [0093]);

and a virtual physical representation control module (i.e. motion/gesture
Application Program Interface 156) (see Fig.2 [0096]) coupled to the microprocessor
(210) and presenting a virtual physical representation (i.e. the state of health or fatigue
created in the health maintenance application) to the user interface (i.e. display 212) in
response to a signal from the context sensor (i.e. the tactile and force sensors sense
the context information and allow the health maintenance application to then assign the
state of health or fatigue) (see Fig.2, [0116], [0117], [0118]).

As to claim 2, Nykanen teaches the method of claim 1, further comprising the
step of relating the virtual physical representation to the sensed contextual
characteristic (i.e. the virtual physical representation of health or fatigue state is directly
linked to the metadata from the touch transducer which is processed and recognized as
health or fatigue representation state) (see [0116]).

As to claim 3, Nykanen teaches the method of claim 1, further comprising the step of relating the virtual physical representation to the data management function (i.e. the virtual physical representation of health or fatigue state is directly linked to the database to provide suggestion for medication to palliate the sensed fatigue) (see [0117]).

As to claim 4, Nykanen teaches the method of claim 1, further comprising the step of presenting the virtual physical representation by a user interface of the device (i.e. the virtual physical representation of health or fatigue state is directly linked to the interface of the wireless device 100, as when a recognized fatigue representation state is accompanied by an alarm which is made my the interface to make the user aware of the condition) (see [0117]).

As to claim 5, Nykanen teaches the method of claim 4, further comprising the step of controlling the data management function of the device in response to the context sensor signal (i.e. the detection of virtual physical representation of health or fatigue state is directly linked to the data management function of wireless device 100, since the access of medical information from the database is required to provide solutions to be sent back to the user as medication suggestion) (see [0117]).

As to claim 6, Nykanen teaches the method of claim 5, further comprising the step of executing a first data management function (access the database on the device 100) of the device (100) in response to receiving the context sensor signal (i.e. touch sensory metadata) and the device operating in a first mode (i.e. accessing the database on the wireless device 100 to determine medication for the condition) (see [0117]), and

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executing a second data management function (i.e. using the communication network to access the large data base of the server) of the device in response to receiving the context sensor signal (i.e. touch sensory metadata) and the device operating in a second mode (i.e. accessing the server's data base remotely, and access for example the user's allergy reactions to medications, to improve the service provided) (see [0118]).

As to claim 7, Nykanen teaches the method of claim 4, further comprising the step of proportionally executing the data management function (i.e. sampling and digitizing the context sensor input and converting it into useful metadata, since the analog data are continuous they must be proportionally converted to the digital form which has finite scale levels) (see Fig.2, [0092]) of the device in response to the context sensor signal (touch sensor 124) (see Fig.1), and wherein the virtual physical representation is presented proportionally to the execution of the data management function (i.e. the state of health or fatigue is determined by referencing the degree of response in the tactile, force, temperature sensors that is proportionally processed into data and formed into a statistical model) (see Fig.2, [0115], [0116], [0117]).

As to claim 8, Nykanen teaches the method of claim 1, wherein the context sensor is a light sensor (128) (see Fig.1).

As to claim 9, Nykanen teaches the method of claim 8, wherein the touch sensor is a plurality of touch sensors (i.e. both the tactile sensor and the force sensor have the ability to function as a touch sensor when the user holds the wireless device100) (see

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[0116]) carried on a housing of the device (i.e. the various types of sensors are physically located on the handset) (see [0095]).

As to claim13, Nykanen teaches the device of claim 12, wherein the device context characteristic sensor (touch sensor 124) selectively provides an input signal to the microprocessor (210) in response to activation of a predetermined contextual characteristic (i.e. the user's in detected by the touch sensor and the tactile and force feedback is interpreted by the microprocessor 210 to create the alarm and medication output on the interface) (see Fig.2, [0117], [0118], [0119]).

As to claim 14, Nykanen teaches the device of claim 13, wherein the context sensor is a temperature sensor (132) (i.e. the tactile sensors signals are outputted and combined with force/temperature input metadata, this means that the temperature sensor is used with touch sensor while determining fatigue state) (see Fig.1, [0115]).

As to claim15, Nykanen teaches the device of claim 13, wherein the virtual physical representation control module generates a virtual representation of a well known physical phenomenon (i.e. weather or not if a person is fatigued or not) that is associated with a context sensed by the context sensor (touch sensor 124) and wherein the virtual physical representation control module (application programs 106) sends the virtual representation to the user interface (i.e. the wireless device sent the user alarm when the context sensors sense the condition of fatigue in the user) (see Fig.2, [0117]).

As to claim 16, Nykanen teaches the device of claim 15, wherein the user interface is a display (212) (i.e. the suggested medication in case fatigue is detected) (see [0117], [0118], [0119]).

As to claim 20, Nykanen teaches the device of claim 12, the virtual physical representation control module (i.e. motion/gesture API 156) is a gesture translation module coupled to the microprocessor (210) and receiving input from the device context characteristic sensor (i.e. touch sensor 124), the virtual physical representation control module converting motion (i.e. holding the wireless device) of the device into control commands to operate the device (i.e. activating the health maintenance program to create an alarm and suggest medication) (see Fig.2, [0117], [0118], [0119]).

As to claim 21, Nykanen teaches the device of claim 12, wherein the user interface is a display (212), a microphone (i.e. audio sensor 125), a keypad (104) (see Fig.1 and Fig.2).

10. Claims 17-19 are rejected under 35 U.S.C. 103(a) as being unpatentable over Nykanen in view of Steele et al. (US Patent: 5,169,342)

As to claim 17, Nykanen teaches the device of claim 16, wherein the virtual representation of a well known physical phenomenon, but does not explicitly teach that it is a graphical animation presented on the display. Steele teaches the physical phenomenon that is a graphical animation on the display (i.e. the animation shows that the lower container is being filled with a liquid pouring from an upper vessel) (see Fig.13d-13g, Col. 12, lines 9-31). Therefore, it would have been obvious for one of

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ordinary skill in the art at the time of invention to have included the virtual graphic representation of Steele in the context sensitive device of Nykanen in order to help the device to communicate with a user being conversant in a different language (Steele Col.1, Lines 19-20).

As to claim 18, Nykanen teaches the device of claim 17; Steele teaches wherein the graphical animation presented on the display is a virtual representation of liquid in a container (i.e. the animation shows that the lower container is being filled with a liquid pouring from an upper vessel) (see Fig.13d-13g, Col. 12, lines 28-31).

As to claim 19, Nykanen teaches the device that is able to sense gesture based on a context sensor (i.e. the wireless device has Motion/Gesture API 156 that uses the data from context inference engine 136) (see Fig.2). Steele teaches wherein the virtual representation of a liquid in a container is an animation of the liquid emptying from the container in response to sensing a pouring gesture made with the device (i.e. the icon is activated by clicking the arrow cursor (input from the user) on it, which then activate the pouring animation) (see Fig.13d-13g, Col. 12, lines 26-31). Therefore, the combination of Nykanen's sensing the gesture of the user via the context sensor, and Steele's graphical representation of liquid animation after the user makes an input reads on the claim.

11. Response to Argument

(a) With respect to the rejection under 35 USC 102 as being anticipated over Nykanen, to claims 1-16 and 20-21, in the Office Action dated 11/02/2007, Appellant

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argues that the Nykanen reference does not disclose limitations **(i) determining a virtual physical representation to be output in response to the execution of the data management function (claim 1); (ii) a virtual physical representation to be output in response to the execution of the data management function (claim 1); (iii) displaying a virtual representation of the sensed contextual characteristic of the device (claim 10); (iv) presenting a virtual representation of a physical principle on a user interface of the device (claim 11); and (v) virtual physical representation control module coupled to the microprocessor and presenting a virtual physical representation to the user interface in response to a signal from the context sensor (claim 12)** page 6, second and third paragraph, of the Appeal Brief regarding to claim 1. Examiner disagrees because as follows:

Regarding limitation **(i)** above, the prior art Nykanen does teach a virtual physical representation which is the representation of the physical states of the user with the vector "good_health_resting_normal" and "good_health_fatigued" this is a representation of the user's physical state of well being in terms of a virtual object being assigned which is derived from data management of remote resource via a virtual network Internet 130. Also, the "virtual physical representation" limitation used by the appellant is broad enough to read on a variety of representation. Since the appellant did not cite the virtual water pouring in the independent claims, no such limitation exist in these claims, and the virtual physical limitation can be the representation of physical characteristics such as touch based input of the user's physical vital signs when the

user hold the wireless device, where the touch based input is received and virtually encapsulated as useful virtual representation of the physical state.

Regarding limitation **(ii)** above, Nykanen in figure 1 and 2, clearly teaches the representation being outputted in response to the execution of data management function when the web browser 102 on the wireless device 100 of Nykanen output the virtual physical representation of well being to be display to the user after have the relevant data being processed by the application program.

Regarding limitation **(iii)** above, Nykanen teaches the contextual characteristic of the device in figure 2A where the web server 160 receives the user data from the context aware interface 186 and feedback the health information from the user database 184 so that the virtual representation of user well being state can be calculated correctly and output back to the user via the browser display.

Regarding limitation **(iv)** above, Nykanen teaches the representation of user physical state of health which is based on well understood physical principle, that in certain physical state, a person is experiencing stress or fatigue. Nykanen teaches the force and temperature input from the user which are vital signs of the human bodies which are then processed to derived the specific memory handle in the wireless device which is output to the user via the health maintenance application that output the user the appropriate actions to alleviate the being detected, this requires the device being able to output the information from the wireless device to the user, and since the wireless device uses a browser 102 to interact with the user the virtual physical

representation of physical wellbeing is displayed to the user so as to allow the user to receive the suggestions of medications to palliate the sensed fatigue.

Regarding limitation **(v)** above, Nykanen teaches the WEB server 160 having the capability of controlling the user data and enabling the creation of the virtual representation of well being to then be downloaded to the microprocessor of the wireless device 100 which output this information to the user in the browser 102.

(b) With respect to the rejection under 35 USC 103 as being unpatentable over Nykanen in view of Steele, to claims 17-19, in the Office Action dated 11/02/2007, Appellant argues that the combination of Nykanen and Steele reference does not teach the limitations of **(i) "virtual physical representation control module coupled to the microprocessor and presenting a virtual physical representation to the user interface in response to a signal from the context sensor" and (ii) "virtual representation of a well known physical phenomenon is a graphic animation presented on the display."**

Regarding limitation **(i)** see discussion of answer to the independent claims above, Nykanen in figure 2, clearly teaches a virtual physical representation control module 156 in the memory of the device 202 coupled to the microprocessor (210) and presenting a virtual physical representation of state of health or fatigue to the user interface 212 in response to a signal from the context sensor.

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Regarding limitation (ii) see discussion of answer to the independent claims above, Nykanen teaches the virtual physical representation of health or fatigue state in textual bases on the browser 102 to enable the user to receive the information and also suggest correcting measure, but is silent above using an animation to carry out this task, therefore Steele is used to teaches a graphical representation of the physical representation instead of textual based information output so that user with different language background can still understand the conditions of their physical state of well being. Since it is well known the art that a wireless device can have graphic user interface to display information in the form of a browser it is obvious that the combination of the Nykanen wireless device with the graphically displaying data would be able to achieve the desired result of creating an output that transcend language barrier and enable superior user experience.

12. Related Proceeding(s) Appendix

No decision rendered by a court or the Board is identified by the examiner in the Related Appeals and Interferences section of this examiner's answer.

For the above reasons, it is believed that the rejections should be sustained.

Respectfully submitted,

/Calvin C Ma/

Examiner, Art Unit 2629

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/Chanh Nguyen/

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